

CLMPTO with claims renumbered in the same order as presented by applicant, as indicated on Issue Classification Form.

AMENDMENTS TO THE CLAIMS

1-3. (Canceled).

1/ ~~1.~~ (Currently Amended) ~~The nucleic acid molecule of claim 2, wherein said A nucleic acid molecule comprising sequences encoding the pre-membrane and envelope proteins of a West Nile virus and the capsid and non-structural proteins of a Yellow Fever virus, wherein said envelope protein comprises attenuating amino acid substitutions~~ substitution is in position 316 and position 440, or the complement of said nucleic acid molecule.

2/ ~~2.~~ The nucleic acid molecule of claim ~~1~~, ~~wherein said nucleic acid molecule~~ wherein the sequence encoded by said nucleic acid molecule further comprises an amino acid substitution in amino acid position 107.

3/ ~~3.~~ (Currently Amended) The nucleic acid molecule of claim ~~2~~ ², wherein said amino acid substitution at position 107 is leucine to phenylalanine, or a conservative amino acid of phenylalanine.

4/ ~~4.~~ (Currently Amended) The nucleic acid molecule of claim ~~2~~ ¹, wherein said amino acid substitution at position 316 is alanine to valine, or a conservative amino acid of valine.

5/ ~~5.~~ (Currently Amended) The nucleic acid molecule of claim ~~2~~ ¹, wherein said amino acid substitution at position 440 is lysine to arginine, or a conservative amino acid of arginine.

⁶~~8~~. (Currently Amended) A chimeric flavivirus encoded by the nucleic acid molecule of claim ~~4~~¹.

⁷~~10~~. (Original) A method of inducing an immune response to West Nile virus in a subject, said method comprising administering to the subject the chimeric flavivirus of claim ~~8~~⁶.

⁸~~11~~. (Original) The method of claim ~~10~~⁷, wherein said subject is at risk of developing, but does not have, West Nile virus infection.

⁹~~12~~. (Original) The method of claim ~~10~~⁷, wherein said subject is infected with West Nile virus.

~~10~~¹³. (Currently Amended) A method of making a chimeric flavivirus vaccine, comprising introducing the nucleic acid molecule of claim ~~4~~¹ into cells.

14. (Canceled).

¹¹~~15~~. (Currently Amended) The nucleic acid molecule of claim ~~4~~¹, wherein said nucleic acid molecule comprises the genome of a chimeric flavivirus comprising the pre-membrane and envelope proteins of West Nile virus and the capsid and non-structural proteins of Yellow Fever virus, wherein said envelope protein comprises attenuating amino acid substitutions in position

316 and position 440 or the complement thereof.

16-18. (Canceled).

⁶
12 ~~19~~. (Currently Amended) The chimeric flavivirus of claim ~~19~~ 16, wherein the envelope protein of said chimeric flavivirus further comprises an amino acid substitution ~~is~~ in amino acid position positions 107, 316, and 440.

¹²
13 ~~20~~. (Currently Amended) The chimeric flavivirus of claim ~~20~~ 16, wherein said amino acid substitution at position 107 is leucine to phenylalanine, or a conservative amino acid of phenylalanine.

⁶
14 ~~21~~. (Currently Amended) The chimeric flavivirus of claim ~~21~~ 16, wherein said amino acid substitution at position 316 is alanine to valine, or a conservative amino acid of valine.

⁶
15 ~~22~~. (Currently Amended) The chimeric flavivirus of claim ~~22~~ 16, wherein said amino acid substitution at position 440 is lysine to arginine, or a conservative amino acid of arginine.

23-25. (Canceled).

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16 ~~26~~. (Currently Amended) The method of claim ~~26~~ 23, wherein the envelope protein of said chimeric flavivirus further comprises an amino acid substitution ~~is~~ in amino acid position

positions 107, 316, and 440.

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17 ~~18~~ 21. (Currently Amended) The method of claim ~~26~~ 23, wherein said amino acid substitution at position 107 is leucine to phenylalanine, or a conservative amino acid of phenylalanine.

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18 ~~28~~ 28. (Currently Amended) The method of claim ~~10~~ 23, wherein said amino acid substitution at position 316 is alanine to valine, or a conservative amino acid of valine.

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19 ~~29~~ 29. (Currently Amended) The method of claim ~~10~~ 23, wherein said amino acid substitution at position 440 is lysine to arginine, or a conservative amino acid of arginine.

30-32. (Canceled).

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20 ~~33~~ 33. (Currently Amended) The method of claim ~~13~~ 30, wherein the envelope protein of said chimeric flavivirus further comprises an amino acid substitution is in amino acid position positions 107, 316, and 440.

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21 ~~34~~ 34. (Currently Amended) The method of claim ~~23~~ 30, wherein said amino acid substitution at position 107 is leucine to phenylalanine, or a conservative amino acid of phenylalanine.

¹⁰
22 ~~35~~. (Currently Amended) The method of claim ~~13~~ ¹⁰ 30, wherein said amino acid substitution at position 316 is alanine to valine, or a conservative amino acid of valine.

¹⁰
23 ~~36~~. (Currently Amended) The method of claim ~~13~~ ¹⁰ 30, wherein said amino acid substitution at position 440 is lysine to arginine, or a conservative amino acid of arginine.

24 ~~37~~. (Previously Presented) A vaccine composition comprising the flavivirus of claim ~~9~~ ⁶ 38-40. (Canceled).

²⁴
25 ~~41~~. (Currently Amended) The vaccine composition of claim ~~31~~ ²⁴ 38, wherein the envelope protein of said chimeric flavivirus further comprises an amino acid substitution is in amino acid position positions 107, 316, and 440.

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26 ~~42~~. (Currently Amended) The vaccine composition of claim ~~41~~ ²⁵ 38, wherein said amino acid substitution at position 107 is leucine to phenylalanine, or a conservative amino acid of phenylalanine.

²⁴
27 ~~43~~. (Currently Amended) The vaccine composition of claim ~~31~~ ²⁴ 38, wherein said amino acid substitution at position 316 is alanine to valine, or a conservative amino acid of valine.

²⁴
28 ~~44~~. (Currently Amended) The vaccine composition of claim ~~31~~ ²⁴ 38, wherein said amino

acid substitution at position 440 is lysine to arginine, or a conservative amino acid of arginine.